ThinkPad X280 Platform Specifications

Processor

7th Generation Intel® Core™ i3 / i5 Processor
* i3-7130U is NOT available in US and EMEA; i5-7200U is NOT available in US

Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics
i3-7020U	2	4	2.3 GHz	-	3MB	DDR4-2133	Intel HD Graphics 620
i3-7130U			2.7 GHz	-	3MB		
i5-7200U			2.5 GHz	3.1 GHz	3MB		
i5-7300U			2.6 GHz	3.5 GHz	3MB		

or 8th Generation Intel Core i3 / i5 / i7 Processor

Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics
i3-8130U	2	4	2.2 GHz	3.4 GHz	4MB	DDR4-2400	Intel UHD Graphics 620
i5-8250U	4	8	1.6 GHz	3.4 GHz	6MB		
i5-8350U			1.7 GHz	3.6 GHz	6MB		
i7-8550U			1.8 GHz	4.0 GHz	8MB		
i7-8650U			1.9 GHz	4.2 GHz	8MB		

Graphics
Intel HD Graphics 620 or Intel UHD Graphics 620 in processor;
supports external digital monitor via HDMI or USB Type-C;
supports three independent displays;
Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@30Hz (HDMI)

Chipset
Intel SoC (System on Chip) platform
Memory
4GB, 8GB, or 16GB / 2400MHz DDR4 / soldered to systemboard, no sockets
* 4GB memory is NOT available in US and EMEA
* System clocks down for processors with lower memory controller

Display
Some: 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight,
220 nits, 16:9 aspect ratio, 400:1 contrast ratio
Some: 12.5" (317.5mm) FHD (1920x1080), anti-glare, LED backlight, WVA,
300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle
Multi-touch *(opt)* On-cell touch, supports 10-finger gesture (FHD only)
* FHD non-touch model is NOT available in US

Storage
One of the following, configurable by model:
• M.2 SSD / SATA 6.0Gb/s (e.g. xxxGB SSD M.2)
• M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s (e.g. xxxGB SSD M.2 PCIe NVMe)
Optical
None

Ethernet
Native Intel Ethernet Connection I219-V (*Non-vPro*) or I219-LM (*vPro*)
via optional ThinkPad Ethernet Extension Adapter Gen 2

WLAN *(optional)* Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + Bluetooth 4.1, M.2 card
Bluetooth™ *(opt)* Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter

WWAN *(optional)*
• Wireless WAN upgradable (special bid only)
• Integrated Mobile Broadband 4G LTE,
Intel XMM™ 7262 (Fibocom L830-EB), M.2 card (EMEA only)
• Integrated Mobile Broadband 4G LTE-A,
Intel XMM™ 7360 (Fibocom L850-GL), M.2 card
* For non-WWAN model, it means the model is NOT WWAN upgradable
SIM card *(opt)* Nano-SIM card slot, in the combo slot with microSD card reader,
optional Verizon LTE (US) SIM card

Dimensions *WxDxH:* 12.11" x 8.26" x 0.69-0.70"; 307.7mm x 209.8mm x 17.4-17.8mm
Weight *FHD non-touch model:* 2.49 lb / 1.13 kg;
HD non-touch model: 2.78 lb / 1.26 kg;
FHD multi-touch model: 2.79 lb / 1.27 kg
Case color Black
Case material *Display cover:* Carbon Fiber (FHD non-touch model) or
Glass Fiber (HD & FHD multi-touch model);
Bottom: Magnesium/Aluminum

Smart card reader *Optional:* Smart card reader
Media reader MicroSD card reader, in the combo slot with nano-SIM card
Ports Two USB 3.1 Gen 1 (one Always On),
one USB 3.1 Type-C Gen 1 (with the function of Power Delivery and DisplayPort),
one USB 3.1 Type-C Gen 2 / Thunderbolt 3 (with the function of PD and DP),
HDMI 1.4b, Ethernet extension connector,
combo slot of nano-SIM card (WWAN models) and microSD card reader,
headphone / microphone combo jack, optional smart card reader,
side docking connector, security keyhole
* Depending on many factors, actual data transfer speed may be lower than theoretical speed
Monitor cable *HDMI to VGA:* Lenovo HDMI to VGA Monitor Adapter
(optional) *USB-C to VGA:* Lenovo USB-C to VGA Adapter
USB-C to DP: Lenovo USB-C to DisplayPort Adapter
Bundled Accy *Optional:* ThinkPad Ethernet Extension Adapter Gen 2

Camera *(optional)* *One of the following, configurable by model:*
• HD720p camera with ThinkShutter camera privacy, fixed focus
• IR camera and HD720p camera, fixed focus
Audio support HD Audio, Realtek® ALC3287 codec /
stereo speakers, 2W x 2, Dolby® Audio™ Premium /
dual array microphone (for special bid model, microphone is optional),
headphone / microphone combo jack

Keyboard 6-row, spill-resistant, multimedia Fn keys, optional LED backlight
UltraNav™ TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad

Security Power-on password, hard disk password, supervisor password, security keyhole
Security chip Discrete TPM 2.0, TCG Certified (may be disabled in some region)
vPro *(optional)* Intel vPro Technology
Fingerprint reader *Optional:* Touch style match on chip fingerprint reader on the palm rest,
anti-spoofing technology
NFC *(optional)* Near Field Communication

Battery Integrated Li-ion 48Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
with 65W AC adapter
Max battery life *MobileMark® 2014:* 16.6 hr
* Battery life varies significantly with hardware configurations, settings, usage, & other factors
AC adapter 45W or 65W USB-C AC adapter

Operating system *Optional:* Windows® 10 Home 64 or Windows 10 Pro 64

Limited warranty *One of the following, configurable by model:*
• 1-year depot repair service
• 1-year depot with 2-year system board repair service
• 1-year/3-yr battery depot repair service
• 1-year + 2-year depot repair service
• 1-year + 2-year limited onsite service
• 3-year/1-yr battery depot repair service
• 3-year/3-yr battery depot repair service
• 3-year/1-yr battery limited onsite service
• 3-year/3-yr battery limited onsite service

Mil-Spec test MIL-STD-810G military testing

Environment EPEAT™ Gold (US only); ENERGY STAR® 6.1; RoHS-compliant

Note: The specifications above may not be available in all regions and might change by regions.